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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/581,202	06/01/2006	Mamoru Miyachi	107156-00333	3216
4372	7590	05/23/2008		
ARENT FOX LLP 1050 CONNECTICUT AVENUE, N.W. SUITE 400 WASHINGTON, DC 20036			EXAMINER FORD, KENISHA V	
			ART UNIT	PAPER NUMBER
			2812	
			NOTIFICATION DATE	DELIVERY MODE
			05/23/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/581,202	Applicant(s) MIYACHI ET AL.	
	Examiner KENISHA V. FORD	Art Unit 2812	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 January 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 3-8 is/are rejected.
- 7) ☒ Claim(s) 9 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 June 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This Office Action is in response to the Amendment filed on 22 January 2008. Currently, claims 3-9 are pending. Claims 1 and 2 have been canceled.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 3-6 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishitsuka et al. (US 6,748,001) in view of Takahashi et al. (US 2005/0040413 A1).

Regarding claim 3, Nishitsuka et al. teaches a method for fabricating a semiconductor laser device emitting a plurality of laser beams of different wavelengths, comprising:

- A first process of fabricating a first intermediate body on a semiconductor substrate (10) including a step of forming a multi-layer stack (2) having a semiconductor for forming a first lasing portion (Fig. 10, col. 3, lines 46-58)

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- A second process for fabricating a second intermediate body on a support substrate including a step of forming a layer containing at least a light absorption layer (col. 8, lines 20-26), a step of forming a second multi-layer stack of a semiconductor for forming a second lasing portion on the light absorption layer (11) and a step of forming a groove in the multi-layer stack (1) (Fig. 10, col. 3, lines 30-45; col. 8, 20-26).
- A third process for fabricating a bonded body by adhering the faces of the first (31) and second (33) intermediate bodies via an electrically conductive adherent layer (35) (col. 3, line 64-col. 4, line 5).
- A fourth process for decomposing the light absorption layer by irradiating the light absorption layer with light through the support substrate of the bonded body to strip of the support substrate along the decomposed light absorption layer (col. 8, lines 12-26)

Nishitsuka et al. does not disclose that the light absorption layer is made of InGa $\bar{\text{N}}$.

However, Takahashi et al. discloses a device that contains an active layer (204) in between two multi-layer stacks (p. 12, para. 280 & 282; p. 23, para. 465 & 466).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Takahashi et al. in the device of Nishitsuka et al. to fabricate a semiconductor laser device with a light absorption layer (also referred to as an active layer) made of InGa $\bar{\text{N}}$ (p. 12, para. 280 & 282; p. 23, para. 465 & 466).

Regarding claim 4, Nishitsuka et al. teaches a method for fabricating a semiconductor laser device wherein in the second process the groove is formed deeper than a depth from a surface of the second multi-layer stack to the light absorption layer (col. 3, lines 35-39).

Regarding claim 5, Nishitsuka et al. teaches a method for fabricating a semiconductor laser device wherein the light passes through the support substrate and is absorbed by the light absorption layer (col. 8, lines 12-26).

Regarding claim 6, Nishitsuka et al. teaches a method for fabricating a semiconductor laser device wherein at least one of the first or second processes includes forming an adherent layer on at least one of the faces of the first or second intermediate bodies on the sides of the multi-layer stacks (col. 3, line 64-col. 4, line 5).

Regarding claim 8, Nishitsuka et al. discloses a method wherein the adherent layer is a metal (col. 3, line 64-col. 4, line 5).

4. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nishitsuka et al. (US 6,748,001) and Takahashi et al. (US 2005/0040413 A1) as applied to claim 3-6 and 8 above, and further in view of Miyachi et al. (US 2002/0142503 A1).

However, Nishitsuka et al. does not teach the materials that the first and second multi-layer stacks are made of.

However, Miyachi et al. discloses a method for fabricating a semiconductor laser device wherein:

- The first multi-layer stack has a III-V compound semiconductor containing any one of arsenic, phosphorus and antimony as a group V element or a II-VI compound semiconductor (p. 3, para. 40, lines 1-6)
- The second multi-layer stack has a nitride-based III-V compound semiconductor with the group V element being nitrogen (p.1, para. 21).

Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of Miyachi et al. in the method of Nishitsuka and Takahashi to obtain a method for transferring the multi-layer stack/body onto a substrate that is highly cleavable (p.1, para. 7).

Allowable Subject Matter

5. Claim 9 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

6. Applicant's arguments with respect to claims 3-8 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be

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calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KENISHA V. FORD whose telephone number is (571)270-3328. The examiner can normally be reached on Monday-Thursday 7:00-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Garber can be reached on (571) 272-2194. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

KVF

/Walter L. Lindsay, Jr./

Primary Examiner, Art Unit 2812